

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021025**Date Inspected:** 21-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhou Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 12BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated DP3018-001-021, Longitudinal Diaphragm to Deck Plate hold back weld. The welder is identified as #052493 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

Segment 12CW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG30065-035, Longitudinal Diaphragm to Bottom Plate hold back weld. The welder is identified as #040755 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-B-P-T-2232-ESAB.

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

### Segment 12BW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3004V-051, Longitudinal Diaphragm to Bottom Plate hold back weld. The welder is identified as #046709 and was observed welding in the 2G (horizontal) position using approved Welding Procedure Specification WPS-345-SMAW-2G (2F)-FCM-repair-1 for WR20150.

### Segment 12BW/12CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW12C-001, Bottom Plate transverse splice. The welder is identified as #046709 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-FCM-repair-1 for WR20263.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a UT repair on a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated OBW12C-001, Bottom Plate transverse splice. The welder is identified as #040775 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-FCAW-1G (1F)-ESAB-repair for WR20263.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspector are identified as Wang Li Yang and Zhou Peng. The welding variables recorded by QC appeared to comply with the Applicable WPS.

### Segment 12BE/12CE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Side Plate transverse CJP splice, bike path side.

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Edge Plate transverse CJP splice, cross beam side.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

#### **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Hernandez,Dan

Quality Assurance Inspector

---

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

**Reviewed By:** Dsouza,Christopher

QA Reviewer